

Title (en)  
TUNABLE FABRY-PEROT FILTER ELEMENT, SPECTROMETER DEVICE AND METHOD FOR MANUFACTURING A TUNABLE FABRY-PEROT FILTER ELEMENT

Title (de)  
ABSTIMMBARES FABRY-PEROT-FILTERELEMENT, SPEKTROMETERVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG EINES ABSTIMMBAREN FABRY-PEROT-FILTERELEMENTS

Title (fr)  
ÉLÉMENT DE FILTRE FABRY-PÉROT RÉGLABLE, DISPOSITIF DE SPECTROMÈTRE ET PROCÉDÉ DE FABRICATION D'UN ÉLÉMENT DE FILTRE FABRY-PÉROT RÉGLABLE

Publication  
**EP 3683557 B1 20210922 (EN)**

Application  
**EP 19152623 A 20190118**

Priority  
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Abstract (en)  
[origin: EP3683557A1] According to an embodiment, a tunable Fabry-Perot (FP) filter element 100 comprises a first FP filter stack 110 arranged at a movable first carrier element 120, and a second FP filter stack 115 arranged in an opposing configuration to the first FP filter stack 110 at a second carrier element 125, wherein, upon an actuation, the first carrier element 120 with the first FP filter stack 110 is vertically movable with respect to the second carrier element 125 with the second FP filter stack 115, for adjusting the distance  $d_{<sub>1</sub>}$  between the first and second opposing FP filter stack 110, 115, and wherein the movable first carrier element 120 is formed as an SON structure (SON = silicon-on-nothing) in an SON substrate 130, wherein the SON structure 120 is movable suspended by means of a mechanical spring element 135 to the SON substrate 130.

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Cited by  
GB2596537A; CN114823939A

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